

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

Ex 61 H

UNITED STATES DEPARTMENT OF AGRICULTURE,
STATES RELATIONS SERVICE.

A. C. TRUE, Director.

HOW TEACHERS IN RURAL ELEMENTARY SCHOOLS MAY
USE A SOIL SURVEY.

Purpose.—This leaflet is intended to suggest to teachers in elementary rural schools how they may utilize the soil surveys of their counties or sections in connection with the teaching of agriculture. Every teacher should know the agricultural conditions of the particular section in which his or her school is located. The soil survey supplies this information in a very comprehensive manner. Each rural school should be supplied with one or more copies of the local survey that the school instruction in agriculture may be adapted to local conditions.

While the suggestions in this leaflet are somewhat general, with slight modification they may be adapted to the use of any survey.

Relation to the course of study.—The survey may be used in connection with the study of such phases of agriculture as soils, crops, fruits, vegetables, and farm animals; also in suggesting suitable correlations with such subjects as geography, history, and the like.

Agricultural topics.—Soils: (1) Names, areas, and locations of soil types (see map); (2) description, development, origin, primal use, and present adaptation of each type.

General study questions.—By what color is each soil type indicated on the map? Study the distribution of soil types as indicated by the colors on the map. What are the locations of types with respect to streams? Group the soil in the order of the extent of areas as indicated on the map. What is the name of the soil on which the school building stands? What soil types are found on the home farms of the pupils of the class? Which types are most productive? What types are mainly in timber? In native grass? On what soils are there most wagon roads? On what soils are the roads in best condition? On what soils do roads get in bad condition in wet weather? Why? On what soils are roads most dusty in dry weather? On what soils are roads most stony? Most hilly? On what soils are there the largest and best farm houses and buildings? On what soils do farmers use a great deal of machinery? Where do they do dairy farming? Corn farming? Grain farming? Cotton farming? Cane farming? Orcharding? Trucking? Live stock? Other crops? Where are churches and schoolhouses best and most numerous? What types of soils sell at the highest price? Are differences in

price in proportion to yield of crops? What other factors affect the price of land?

Studies with crops.—List the field, orchard, and garden crops in the order of their importance as related to each soil type. What methods of soil preparation, fertilization, and cultivation are employed in connection with each of the crops grown? What varieties of each of the leading crops are grown most successfully? Name the principal crop rotations practiced on each soil type.

Studies with farm animals.—What opportunities are offered for the growing of live stock? To what extent is each soil type adapted to the production of permanent pastures? Forage crops? Compare as to importance these industries: Beef cattle, dairying, hogs, sheep, poultry. What are the principal grasses used for permanent pastures? What are the principal hay and soiling crops? What is the leading beef breed? Dairy breed? What are the leading breeds of hogs? What is the principal hindrance to the development of the beef cattle industry? Dairying? Poultry? Swine production?

Geography.—The soil map should be carefully studied with reference to boundaries, directions, roads, railroads, villages, streams, elevation, and the like. Study the scale as it applies to the map and practice the pupils in determining and verifying distances on the map by use of the scale. The upper edge of the map indicates north. When observations are made on the map it should take the proper direction. If there is no compass in the building, select an object such as a crossroad, church, or house that can be seen from the school building and place the map so that the direction from the school building to the object as it appears on the map is in line with the object selected as seen from the building.

Study questions.—What is the title of the map? What is the meaning of the scale? Draw the schoolroom to the same scale. Draw 160 acres of land to the same scale. Locate the schoolhouse on the map. Find the distance from the schoolhouse to the principal points in the area surveyed. What is the length of the area surveyed? The width? What symbols are used to indicate houses, cities, roads, railways, lakes, bridges? Locate known points on the map. Compare the scale of the soil map to those of other maps.

What is the mean annual temperature of the area surveyed? What is the average date of the last killing frost in the spring? The first in the fall? What is the annual rainfall?

History.—By whom was the county or section settled? About what date were first permanent settlements made? Give an account of the railroad development; of the building of roads; of the development of rural free delivery routes; of telephone lines; of educational institutions.

C. H. LANE,
Chief Specialist in Agricultural Education.

MARCH 1, 1917.

WASHINGTON : GOVERNMENT PRINTING OFFICE : 1917